



## **DIPHTHERIA**

### **What is diphtheria?**

Diphtheria is a serious disease caused by a toxin (poison) made by bacteria. It causes a thick coating in the back of the nose or throat that makes it hard to breathe or swallow. It can be deadly.

### **How common is diphtheria?**

Diphtheria has not been reported in the United States (U.S.) since 2003. Prior to the introduction of a vaccine in the 1920s, diphtheria was common. Diphtheria remains a serious issue in developing countries with low vaccination coverage. During the 1990s, the countries of the Soviet Union reported more than 150,000 cases.

### **What are the symptoms of diphtheria?**

Diphtheria starts like a cold, with sore throat, mild fever (101 degrees Fahrenheit or less), and chills.

Next, the diphtheria toxin makes a thick coating on the back of the nose or throat. It may be blue or grayish green. The coating makes it hard to breathe or swallow.

### **How serious is diphtheria?**

The coating on the throat can get so thick that it blocks the airway, so the person cannot breathe.

The diphtheria toxin can attack the heart, causing abnormal heart rhythms and even heart failure. It also can attack the nerves, which leads to paralysis (unable to move parts of the body).

About one out of 10 people who get diphtheria dies. In children younger than 5 years, as many as one out of five children who get diphtheria dies.

### **How does diphtheria spread?**

Diphtheria spreads when an infected person coughs or sneezes. A person can spread the disease for up to two weeks after infection.

## **What is the treatment for diphtheria?**

There are no antiviral drugs for treating diphtheria.

## **Can diphtheria be prevented?**

The best prevention against diphtheria is immunization. There are four combination vaccines used to prevent diphtheria, tetanus and pertussis: DTaP, Tdap, DT, and Td. Two of these (DTaP and DT) are given to children younger than 7 years of age, and two (Tdap and Td) are given to older children and adults.

Td is a tetanus-diphtheria vaccine given to adolescents and adults as a booster shot every 10 years, or after an exposure to tetanus under some circumstances. Tdap is similar to Td but also contains protection against pertussis. Adolescents 11-18 years of age (preferably at age 11-12 years) and adults 19 through 64 years of age should receive a single dose of Tdap. For adults 65 and older who have close contact with an infant and have not previously received Tdap, one dose should be received. Tdap also should be given to 7-to-10-year-olds who are not fully immunized against pertussis. Tdap can be given no matter when Td was last received.

*(Upper-case letters in these abbreviations denote full-strength doses of diphtheria (D) and tetanus (T) toxoids and pertussis (P) vaccine. Lower-case “d” and “p” denote reduced doses of diphtheria and pertussis used in the adolescent/adult-formulations. The “a” in DTaP and Tdap stands for “acellular,” meaning that the pertussis component contains only a part of the pertussis organism.)*